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| 10/762,512   | 01/23/2004  | Kazuma Yumoto        | ASAM.0097           | 5242             |
| 38327                      7590                      04/09/2010<br>Juan Carlos A. Marquez<br>c/o Stites & Harbison PLLC<br>1199 North Fairfax Street<br>Suite 900<br>Alexandria, VA 22314-1437 |             |                      |                     |                  |
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| PARK, JEONG S  |             |                      |                     |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/762,512

**Applicant(s)**

YUMOTO ET AL.

**Examiner**

JEONG S. PARK

**Art Unit**

2454

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/200)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/25/2010 has been entered.
2. This communication is in response to Application No. 10/762,512 filed on 1/23/2004. The argument presented on 2/25/2010, which amends claims 1, 2, 7-9, 23, 24, 28, and 29, is hereby acknowledged. Claims 1-49 have been examined.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-49 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 29-31 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 29 is drawn toward a computer readable recording medium for recording a control program. The computer readable recording medium is broad enough to be interpreted as a signal. The examiner suggests replacing the computer readable recording medium with a non-transitory computer readable recording medium in the claims as well as in the specification.

Claims 30 and 31, which are dependent on claim 29, are rejected for similar reasons as presented above.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3, 6 and 32-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aravamudan et al. (hereinafter Aravamudan)(U.S. Patent No. 6,301,609 B1) in view of Manabe et al. (hereinafter Manabe)(U.S. Pub. No. 2003/0154251).

Regarding claim 1, Aravamudan teaches as follows:

a network system comprising:

a session control server (Instance Message (hereinafter **IM**) server, 130 in figure 1 and 2) controlling a communication session created between at least two terminal devices (client's CPE 140 in figure 1 and 2)(the **IM** server interfaces with and services the client via the client's CPE and the client's proxy presence within the Communication Services Platform (CSP) 160 in figure 1 and 2, see, e.g., col. 4, line 65 to col. 5, line 14);

a presence server (Communication Services Platform (hereinafter **CSP**) 160 in figure 1 and 2) managing status information (online status) on one of said at least two terminal devices (the personal data and rules database 168 in figure 1, which are included in the **CSP** 160 in figure 1, maintains the online status and location of the client, see, e.g., col. 6, lines 27-29);

wherein said session control server (interpreted as **IM** server) comprises;

means for detecting a change in status information on a user of said terminal device or on said terminal device (**IM** server periodically polls the client premises equipment to determine whether a network session has been terminated, see, e.g., col. 8, lines 10-23); and

means for notifying said presence server (**CSP**) of an update request for the status information when the change in the status information is detected (the **IM** server conveys an instant message to the **CSP** informing that the user's status has changed to off-line or online, see, e.g., col. 8, lines 19-31).

Aravamudan does not teach of detecting a change in status information on a user of said one of said at least two terminal devices or on said one of said at least two

terminal devices based on a session control message communicated between said at least two terminal devices.

Manabe teaches as follows:

the keyword-detection module (2 in figure 2) acquires from the chat client the remarks in the channel in which the chat client is participating. The keyword-detection module judges whether the acquired remark is sent from another user terminal (equivalent to applicant's terminal device) or inputted by the local terminal (equivalent to applicant's terminal device). If a keyword is included in the remark (equivalent to applicant's session control message communicated between to terminal devices), the keyword-detection module instructs the status-detection section (4 in figure 2) to detect the user status (see, e.g., page 4, paragraph [0075]).

Therefore, Manabe teaches of detecting the status change based on remark communicated between user terminals.

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine Aravamudan with Manabe to include the keyword-detection module taught by Manabe in order to efficiently detect user terminal status in real-time.

Regarding claim 2, Aravamudan in view of Manabe teach all the limitations of claim as presented above per claim 1. The examiner interpreted the first server as the IM server (130 in figure 1 and 2 of Aravamudan) and the second server as the CSP.

Regarding claim 3, Aravamudan teaches as follows:

said presence server (interpreted as CSP) comprises:

means for receiving (network service interface 162 in figure 1 and 2) the update request for the status information (the IM server conveys an instant message to the CSP informing that the user's status has changed to off-line or online, see, e.g., col. 8, lines 19-31);

means for storing (personal data and rules database 168 in figure 1 and 2) the status information (the personal data and rules database maintains the online status and location of the client, see, e.g., col. 6, lines 27-29); and

means for updating said means for storing (personal data and rules database) based on the update request (the CSP database is updated to reflect the off-line status of the user, see, e.g., col. 8, lines 5-31 and step 286 in figure 7).

Regarding claim 6, Aravamudan teaches as follows:

the network system according to claim 1, wherein SIP (Session Initiation Protocol) is used (see, e.g., col. 4, lines 6-25 and 186 in figure 3).

Regarding claims 32-34 and 35-37, Aravamudan teaches as follows:

said means for notifying said presence server (CSP 160 in figure 1) generates information of the update request for the status information when the change in the status information is detected (IM server conveys an instant message to the CSP informing the CSP that the user's status has changed to off-line and the CSP database is updated to reflect the off-line status of the user, see, e.g., col. 8, lines 5-31).

8. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aravamudan et al. (hereinafter Aravamudan)(U.S. Patent No. 6,301,609 B1) in view of Manabe et al. (hereinafter Manabe)(U.S. Pub. No. 2003/0154251) as applied to claims

1 and 3 above, and further in view of Endress et al. (hereinafter Endress)(U.S. Patent No. 6,895,554 B2).

Regarding claims 4 and 5, Aravamudan teaches as follows:

the IM server (equivalent to the applicant's session control server) notifies the CSP (equivalent to the applicant's presence server) of the user's online presence and address and then the CSP updates the CSP database to indicate that the user is online (see, e.g., col. 7, lines 13-20).

Even though Aravamudan teaches the updating process which implicitly including the comparing process, Endress teaches further explicitly as follows:

means for comparing the notified status information (interpreted as new data from live data field) with some other status information (interpreted as current data stored in data field) for checking consistency of the update request with the other status information (comparing the new data with the current data for detecting the difference before updating process, see, e.g., col. 7, line 65 to col. 8, line 22); and

rewrites the other status information (interpreted as current data stored in data field) so that, when the other status information is not consistent with the status information (interpreted as new data from live data field) specified by the update request, the other status information becomes consistent with the status information specified by the update request (current data can be changed by overtyping the current data with new data or by deleting the current data and inserting new data, see, e.g., col. 7, line 65 to col. 8, line 22).



It would have been obvious for one of ordinary skill in the art at the time of the invention to combine Aravamudan in view of Manabe with Endress to include comparing process to update data as taught by Endress in order to efficiently update the stored data by comparing the difference between the stored data and the new data.

9. Claims 7-31 and 38-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aravamudan et al. (hereinafter Aravamudan)(U.S. Patent No. 6,301,609 B1) in view of Manabe et al. (hereinafter Manabe)(U.S. Pub. No. 2003/0154251), and further in view of Kammerer (U.S. Pub. No. 2004/0205175 A1).

Regarding claims 7, 24 and 25, Aravamudan teaches as follows:

a network system comprising:

one or more servers server (Instance Message (hereinafter IM) server, 130 in figure 1 and 2) each having a function to manage a communication session created between terminal devices (client's CPE 140 in figure 1 and 2)(IM server periodically polls the client premises equipment to determine whether a network session has been terminated, see, e.g., col. 8, lines 10-23);

a presence server (Communication Services Platform (hereinafter CSP) 160 in figure 1 and 2) in which status information describing the status of said terminal device or the status of a user of the terminal device is stored (the personal data and rules database 168 in figure 1, which are included in the CSP 160 in figure 1, maintains the online status and location of the client, see, e.g., col. 6, lines 27-29);

one of the servers (IM server) other than said presence server monitors the communication session to detect a change in the status information (IM server periodically polls the client premises equipment to determine whether a network session has been terminated, see, e.g., col. 8, lines 10-23);

when the change is detected, the change in the Status information is notified to said presence server (the IM server conveys an instant message to the CSP informing that the user's status has changed to off-line or online, see, e.g., col. 8, lines 19-31);  
and

a gateway device (126 in figure 1 and 2, 186 in figure 3) support conversion between different networks by using the Session Initiation Protocol (see, e.g., col. 3, line 53 to col. 4, line 25).

Aravamudan does not teach of detecting a change in status information on a user of said one of said at least two terminal devices or on said one of said at least two terminal devices based on a session control message communicated between said at least two terminal devices.

Manabe teaches as follows:

the keyword-detection module (2 in figure 2) acquires from the chat client the remarks in the channel in which the chat client is participating. The keyword-detection module judges whether the acquired remark is sent from another user terminal (equivalent to applicant's terminal device) or inputted by the local terminal (equivalent to applicant's terminal device). If a keyword is included in the remark (equivalent to applicant's session control message communicated between to terminal devices), the

keyword-detection module instructs the status-detection section (4 in figure 2) to detect the user status (see, e.g., page 4, paragraph [0075]).

Therefore, Manabe teaches of detecting the status change based on remark communicated between user terminals.

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine Aravamudan with Manabe to include the keyword-detection module taught by Manabe in order to efficiently detect user terminal status in real-time.

Aravamudan in view of Manabe does not teach SIP used in the one or more servers.

Kammerer teaches as follows:

a Session Initiation Protocol (SIP) based presence server which enables secure corporate instant messaging while allowing the user of any SIP compliant IM client (see, e.g., page 1, paragraph [0008]);

providing users freedom to collaborate by voice and data with any other user on a common IM network regardless of what type of communication device the users are operating (see, e.g., page 2, paragraph [0024]); and

SIP is an application layer control protocol using the Session Description Protocol (SDP) to create sessions and carry session descriptions which allow participants to agree on a set of compatible media types (see, e.g., page 3, paragraph [0048]).

Therefore, inherently a protocol stack is included to support application layer SIP and to support different type of communication device (a protocol stack is interpreted as

a protocol interface layer showing all protocols used under the SIP application layer protocol).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Aravamudan in view of Manabe with Kammerer to include SIP used in IM server as taught by Kammerer in order to efficiently support different communication device and provide session connection between communication devices.

Regarding claims 8 and 22, Aravamudan teaches as follows:

a server (Instance Message (hereinafter IM) server, 130 in figure 1 and 2) connected via a network to a presence server (Communication Services Platform (hereinafter CSP) 160 in figure 1 and 2) managing status information on a user of a terminal device or on the terminal device (client's CPE 140 in figure 1 and 2)(IM server periodically polls the client premises equipment to determine whether a network session has been terminated, see, e.g., col. 8, lines 10-23), said server comprising:

a communication control unit that reforms header parameters, of a received packet from a second terminal device and transfers the received packet, whose header parameters have been reformed, to said first terminal device (data conversion supported by a gateway device by using the SIP, see, e.g., col. 3, line 53 to col. 4, line 25);

a status management unit that manages the status of a communication session created between the first and second terminal devices on a certain expiration time basis (IM server periodically polls the client premises equipment to determine whether a

network session has been terminated, see, e.g., col. 8, lines 10-31 and figure 7);

a terminal location management unit that manages address information on the first terminal device (the client software generates a message indicating user's online status and current user address and the message is sent to the IM server to notify the CSP, see, e.g., col. 7, lines 3-20);

means for detecting a change in information on the status of the communication session (IM server periodically polls the client premises equipment to determine whether a network session has been terminated, see, e.g., col. 8, lines 10-23); and

a presence information update unit that generates a presence information update message, which informs said presence server that the status information or the address information has changed, when the change is detected and issues an instruction to send the presence information update message to said communication control unit (the IM server notifies the CSP of the user's online presence and address and then the CSP updates the CSP database to indicate that the user is online, see, e.g., col. 7, lines 13-20).

Aravamudan does not teach of detecting a change in status information on a user of said one of said at least two terminal devices or on said one of said at least two terminal devices based on a session control message communicated between said at least two terminal devices.

Manabe teaches as follows:

the keyword-detection module (2 in figure 2) acquires from the chat client the remarks in the channel in which the chat client is participating. The keyword-detection

module judges whether the acquired remark is sent from another user terminal (equivalent to applicant's terminal device) or inputted by the local terminal (equivalent to applicant's terminal device). If a keyword is included in the remark (equivalent to applicant's session control message communicated between terminal devices), the keyword-detection module instructs the status-detection section (4 in figure 2) to detect the user status (see, e.g., page 4, paragraph [0075]).

Therefore, Manabe teaches of detecting the status change based on remark communicated between user terminals.

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine Aravamudan with Manabe to include the keyword-detection module taught by Manabe in order to efficiently detect user terminal status in real-time.

Aravamudan in view of Manabe does not teach SIP used in the IM server but in the gateway device.

Kammerer teaches as follows:

a Session Initiation Protocol (SIP) based presence server which enables secure corporate instant messaging while allowing the user of any SIP compliant IM client (see, e.g., page 1, paragraph [0008]);

providing users freedom to collaborate by voice and data with any other user on a common IM network regardless of what type of communication device the users are operating (see, e.g., page 2, paragraph [0024]); and

SIP is an application layer control protocol using the Session Description Protocol (SDP) to create sessions and carry session descriptions which allow

participants to agree on a set of compatible media types (see, e.g., page 3, paragraph [0048]).

Therefore, inherently a protocol stack is included to support application layer SIP and to support different type of communication device (a protocol stack is interpreted as a protocol interface layer showing all protocols used under the SIP application layer protocol).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Aravamudan in view of Manabe with Kammerer to include data conversion (equivalent to the well known data encapsulation) used in SIP as taught by Kammerer in order to efficiently support different communication device communicating with different data type.

Regarding claim 9, Aravamudan teaches as follows:

said means for detecting a change in information on the status of the communication session is further implemented to detect a change in the address information upon receiving from the terminal device, a location registration request message (the client software generates a message, well known SUBSCRIBE message in IM system, indicating user's online status and current user address and the message is sent to the IM server to notify the CSP, see, e.g., col. 7, lines 3-20).

Manabe teaches of detecting the status change based on remark communicated between user terminals as presented above in claim 8.

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to modify Aravamudan in view of Kammerer with Manabe to update current terminal device address when it updates the terminal device status.

Regarding claims 10 and 11, Aravamudan teaches as follows:

said presence information update unit comprises means for checking if a terminal device belonging to the status information is a terminal device managed by said server and, only when the status information in which the change was detected belongs to a terminal managed by said server, generates the presence information update message (IM server generates the presence information only for the registered user CPE, see, e.g., col. 6, lines 32-63); and

said means for checking if a terminal device belonging to the status information is a terminal device managed by said server compares the domain name of the address of the server with the domain name of the address of the terminal device and, when the domain names match, determines that the terminal is to be managed by the server (when the user device register, the provisioning server registers the address of the user's instant message server and provisions the client CPE software with a unique identification, see, e.g., col. 6, lines 32-63).

Kammerer further explicitly teaches as follows:

a proxy server functions substantially the same as on the presence server (IM server) and monitors the status and interactivity of users and can send out notifications to the other users on the network (see, e.g., page 6, paragraph [0083]);



each proxy server has separate users connected based on geographic location of the user and the proxy server (see, e.g., page 6, paragraph [0084]); and

the presence server application sends a presence message to one or more local subscribed clients who are identified as being in the same organization excluding any clients are external to that organization (see, e.g., page 8, paragraph [0116]).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Aravamudan in view of Manabe with Kammerer to include locally managed presence server as taught by Kammerer in order to efficiently manage different domain or organization by separate presence server.

Regarding claims 12-17, Aravamudan in view of Manabe does not teach SIP used in the IM server but in the gateway device.

Kammerer teaches as follows:

the SIP method name determine the nature of the request (see, e.g., page 6, paragraph [0094]); and

SIP method names include REGISTER, INVITE, ACK, SUBSCRIBE, NOTIFY, CANCEL, BYE and OPTIONS (see, e.g., page 6, paragraph [0095]-[0102], for further details, see, e.g., RFC 2543).

Therefore it would have been obvious for one of ordinary skill in the art at the time of the invention to modify Aravamudan in view of Manabe with Kammerer to include standard SIP functionalities used in IM server as taught by Kammerer in order to properly and timely update the presence information based on the well known SIP messages communications.

Regarding claims 18 and 19, Aravamudan teaches as follows:

updating presence information based on the expiration time including a timer to count time of day (updating user inactivity based on the time limit, see, e.g., col. 7, line 41 to col. 8, line 4 and figure 6).

Regarding claim 20, Aravamudan teaches as follows:

means for generating a PUBLISH message or REGISTER message including in a body thereof the status information or the address information, wherein the PUBLISH message or REGISTER message is sent to said presence server as the presence information update message (the client software generates a message (equivalent to applicant's REGISTER message) indicating user's online status and current user address and the message is sent to the IM server to notify the CSP, see, e.g., col. 7, lines 3-20).

Regarding claim 21, Aravamudan teaches as follows:

the PUBLISH message or REGISTER message includes one of the following information: session type, information on the terminal device that has established the session, and information on a coding system and a communication speed used by the established session (the service provider which including IM server, provides means for converting received data and communication mode and channel by utilizing a gateway, which utilizing SIP for session management, see, e.g., col. 3, line 53 to col. 4, line 24).

Aravamudan in view of Manabe does not teach SIP used in the IM server but in the gateway device.

Kammerer teaches as follows:

a Session Initiation Protocol (SIP) based presence server which enables secure corporate instant messaging while allowing the user of any SIP compliant IM client (see, e.g., page 1, paragraph [0008]).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Aravamudan in view of Manabe with Kammerer to include SIP used in IM server as taught by Kammerer in order to efficiently support different communication device and provide session connection between communication devices.

Regarding claim 23, Aravamudan teaches as follows:

a presence server (Communication Services Platform (hereinafter CSP) 160 in figure 1 and 2), connected via a network to a session control server (Instance Message (hereinafter IM) server, 130 in figure 1 and 2) managing a communication session created between at least two terminal devices (client's CPE 140 in figure 1 and 2), for managing status information on said communication session (IM server periodically polls the client premises equipment to determine whether a network session has been terminated, see, e.g., col. 8, lines 10-23), said presence server comprising:

an interface receiving a status information update message received from said session control server (the client software generates a message indicating user's online status and current user address and the message is sent to the IM server to notify the CSP, see, e.g., col. 7, lines 3-20);

storage means (CSP database) for storing a plurality of status information pieces (the IM server notifies the CSP of the user's online presence and address and then the

CSP updates the CSP database to indicate that the user is online, see, e.g., col. 7, lines 13-20);

means for changing a content stored in said storage means (data conversion supported by a gateway device by using the SIP, see, e.g., col. 3, line 53 to col. 4, line 25); and

means for judging whether there is an inconsistency between the status information included in the update message (first status information) and other status information (second status information) stored in said storage means and belonging to a terminal to which the first status information belongs, wherein, if there is an inconsistency between the first status information and the second status information, the second status information is made to match the first status information (explained as above per claims 4 and 5).

Aravamudan does not teach of detecting a change in status information on a user of said one of said at least two terminal devices or on said one of said at least two terminal devices based on a session control message communicated between said at least two terminal devices.

Manabe teaches as follows:

the keyword-detection module (2 in figure 2) acquires from the chat client the remarks in the channel in which the chat client is participating. The keyword-detection module judges whether the acquired remark is sent from another user terminal (equivalent to applicant's terminal device) or inputted by the local terminal (equivalent to applicant's terminal device). If a keyword is included in the remark (equivalent to

applicant's session control message communicated between to terminal devices), the keyword-detection module instructs the status-detection section (4 in figure 2) to detect the user status (see, e.g., page 4, paragraph [0075]).

Therefore, Manabe teaches of detecting the status change based on remark communicated between user terminals.

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine Aravamudan with Manabe to include the keyword-detection module taught by Manabe in order to efficiently detect user terminal status in real-time.

Aravamudan in view of Manabe does not teach SIP used in the IM server but in the gateway device.

Kammerer teaches as follows:

a Session Initiation Protocol (SIP) based presence server which enables secure corporate instant messaging while allowing the user of any SIP compliant IM client (see, e.g., page 1, paragraph [0008]);

providing users freedom to collaborate by voice and data with any other user on a common IM network regardless of what type of communication device the users are operating (see, e.g., page 2, paragraph [0024]); and

SIP is an application layer control protocol using the Session Description Protocol (SDP) to create sessions and carry session descriptions which allow participants to agree on a set of compatible media types (see, e.g., page 3, paragraph [0048]).

Therefore, inherently a protocol stack is included to support application layer SIP and to support different type of communication device (a protocol stack is interpreted as a protocol interface layer showing all protocols used under the SIP application layer protocol).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Aravamudan in view of Manabe with Kammerer to include data conversion (equivalent to the well known data encapsulation) used in SIP as taught by Kammerer in order to efficiently support different communication device communicating with different data type.

Regarding claims 26 and 30, Aravamudan teaches as follows:

means for generating a PUBLISH message or REGISTER message including in a body thereof the status information or the address information, wherein the PUBLISH message or REGISTER message is sent to said presence server as the presence information update message (the client software generates a message (equivalent to applicant's REGISTER message) indicating user's online status and current user address and the message is sent to the IM server to notify the CSP, see, e.g., col. 7, lines 3-20).

Regarding claims 27 and 31, Aravamudan teaches as follows:

the PUBLISH message or REGISTER message includes one of the following information: session type, information on the terminal device that has established the session, and information on a coding system and a communication speed used by the established session (the service provider which including IM server, provides means for

converting received data and communication mode and channel by utilizing a gateway, which utilizing SIP for session management, see, e.g., col. 3, line 53 to col. 4, line 24).

Aravamudan in view of Manabe does not teach SIP used in the IM server but in the gateway device.

Kammerer teaches as follows:

a Session Initiation Protocol (SIP) based presence server which enables secure corporate instant messaging while allowing the user of any SIP compliant IM client (see, e.g., page 1, paragraph [0008]).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Aravamudan in view of Manabe with Kammerer to include SIP used in IM server as taught by Kammerer in order to efficiently support different communication device and provide session connection between communication devices.

Regarding claims 28 and 29, they are rejected for similar reason as presented above in claims 8, 23, and 24.

Regarding claims 38-49, Aravamudan teaches as follows:

said means for notifying said presence server (CSP 160 in figure 1) generates information of the update request for the status information when the change in the status information is detected (IM server conveys an instant message to the CSP informing the CSP that the user's status has changed to off-line and the CSP database is updated to reflect the off-line status of the user, see, e.g., col. 8, lines 5-31).

***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEONG S. PARK whose telephone number is (571)270-1597. The examiner can normally be reached on Monday through Friday 7:00 - 3:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. S. P./  
Examiner, Art Unit 2454

April 6, 2010

***/NATHAN FLYNN/  
Supervisory Patent Examiner, Art Unit 2454***